# APPENDIX C BUTTE FIELD OFFICE FIRE MANAGEMENT PLAN

**Background**: The Butte Field Office contains one ACEC (Sleeping Giant) and five Wilderness Study Areas (WSAs) (Humbug Spires, Sleeping Giant/Sheep Creek, Black Sage, Yellowstone River Island, and Elk Horn). (See Map 4.)

Planning guidance: Current guidance comes from the Headwaters Resource Management Plan (RMP), 1984. This plan establishes modified suppression criteria when appropriate based on values at risk, fire behavior and occurrence, and consistency with other agency plans and policies. Prescribed fire may be used in support of resource management objectives. (See Headwaters RMP, July, 1984, page 24). Fire management is also subject to the decisions contained in the Standards for Rangeland Health and Guidelines for Grazing EIS/ROD (8/97), Elkhorn Mountains Travel Management Plan Amendment/EIS (8/95), and the Outstanding Natural Area Environmental Assessment Decision Record/Amendment (12/86).

The Headwaters RMP will be updated as necessary to include the fire management objectives and guidance for each fire management zone described below.

Wildland fire suppression and rehabilitation guidance common to all areas within the Butte Field Office boundaries: In addition to the state guidelines found in Appendix A, the following resources or values will be given further consideration as specified.

Forestry: Salvage harvest of forest products may be used to meet resource objectives and to reduce hazardous fuels. Rehabilitation will aim to restore natural forest conditions.

Wildlife: Post-wildland fire management (i.e. salvage logging) would be consistent with policy for Special Status species.

Prescribed fire and other fuels management guidance common to all areas within the Butte Field Office boundaries: In addition to the state guidelines found in Appendix A, the following resources or values will be given further consideration as specified.

Weeds: A specific course of action for noxious weeds located on or near proposed prescribed burn units will be determined on a case-by-case basis depending on size of weed infestation, species of noxious weed, knowledge of the weed species involved and fire effects on each species. Any course of action will use the BLM plan "Partners Against Weeds" (January, 1996) in prescribed fire plans.

Wildlife: Prescribed fire projects will not be authorized within sensitive fish, wildlife, and botany habitats when the burn would impair the functioning of the habitats. Prescribed fires will be designed to maintain or enhance native plant communities in support of fish, wildlife and botany populations. For threatened, endangered, and BLM Special Status species, projects will be consistent with recovery and conservation plans, and the Bureau's Special Status policy to conserve threatened, endangered and BLM Special Status species and their habitats.

## BIG HOLE RIVER CORRIDOR (C3) Also see Dillon Field Office

Area description: Approximately 50 percent consists of open sagebrush/grass parks. Another 45 percent is Douglas fir. Mountain mahogany is scattered throughout the area occurring on steep, rocky south and west-facing slopes. Much of this is overtopped by Douglas fir. The remaining 5 percent of the area contains drainages dominated by lodgepole pine. The area is characterized by steep topography and close proximity to the highway. The area includes approximately 68,800 acres (26 percent BLM, 3 percent state, 25 percent private, and 46 percent FS). The area is also characterized by numerous roads from past mining activities.

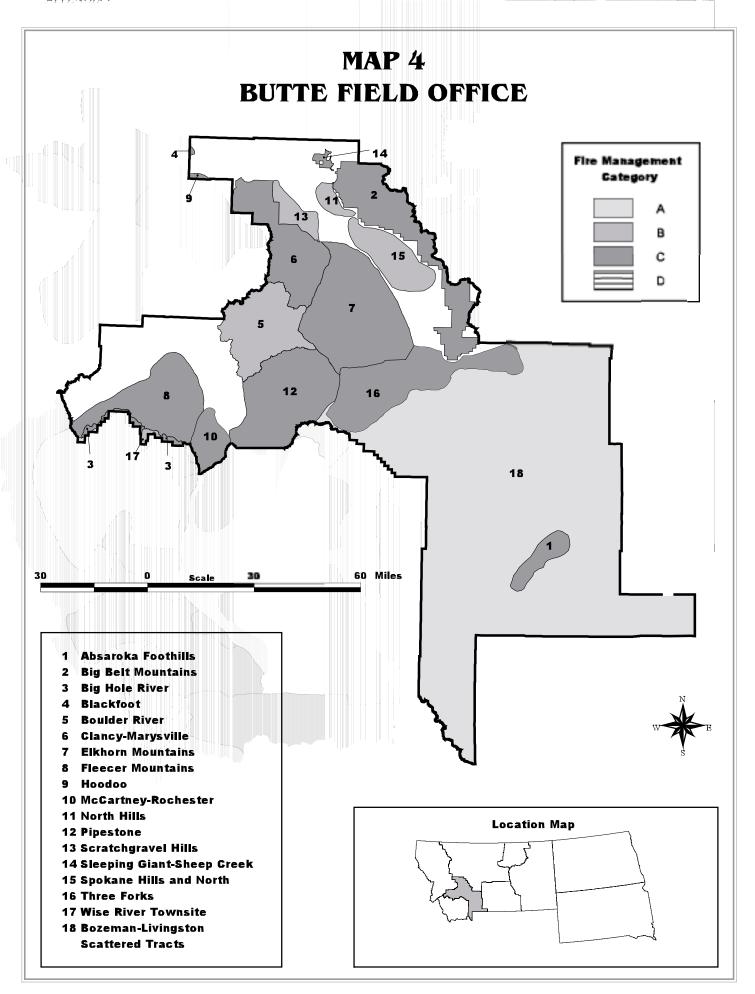
**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 16 fires which burned an estimated 14,500 acres. Average fire size was 905 acres.

**Intermix:** Numerous homes and ranches are present along the Big Hole River corridor.

**Area concerns and constraints:** Fire management should be coordinated with the Forest Service. Steep topography and close proximity to the highway and private land limit suppression options.

**Resource objectives**: Reduce conifer encroachment into sagebrush/grass foothills and parklands to improve winter habitat for mule deer and elk. Protect one mile corridor along the Big Hole River for visual quality.

**Fire objectives:** Fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Fire and other methods may be used to limit the encroachment of Douglas fir into open sagebrush parks and areas of mountain mahogany.



Wildland fire suppression and rehabilitation: Riparian areas and fisheries habitat: No heavy equipment or retardant would be allowed along the primary floodplain of the Big Hole River to protect the sport fisheries resource and the Arctic Grayling.

**Prescribed fire and other fuels management:** Any prescribed burns would be carefully planned to assure an adequate seed source for mountain mahogany and to create a mosaic of seed plants and bare mineral soil.

## **NORTH HILLS (B11)**

**Area description:** The northern half of this area is predominately grassland. The southern portion contains dense stands of ponderosa pine and several subdivisions. The area includes approximately 32,349 acres (20 percent BLM, 7 percent state, and 73 percent private). The Madison Valley is primarily private land with numerous subdivisions.

**Wildland fire history:** In 1984 a large fire burned the northern half of the area. Between 1978 and 1999, federal agencies responded to three fires which burned an estimated 5,243 acres. Average fire size was 1,748 acres.

**Intermix**: This area contains numerous subdivisions. North Hills is in Lewis and Clark County near Helena. It has medium population density, medium escaped fire potential, and medium potential for loss of life or property. Community support is high and there is a medium level of community support.

**Area concerns and constraints:** Wildland fire is not desired due to large amounts of private land and rural subdivisions. Traditional big game winter range also exists within the area. Fire management will also need to be coordinated with the adjoining Forest Service Landscape Plan.

**Resource objectives:** Protect urban interface areas and maintain visual values.

**Fire objective:** Wildland fire is not desired in this area due to the interface with subdivisions and other developments. The appropriate management response to wildland fire within the North Hills area will be aggressive fire suppression. Prescribed fires may used to reduce hazardous fuels.

Wildland fire suppression and rehabilitation: Confine or contain unplanned ignitions to smallest feasible size.

Visual resources: Fire rehabilitation should be coordinated with the Field Office VRM specialist and protected as much as possible.

## **SCRATCHGRAVEL HILLS (B13)**

**Area description:** This area is approximately four miles northwest of Helena in Lewis and Clark County and is characterized by grassland hills which have been colonized by dense stands of ponderosa pine of varying age classes. Private homes and developments have been built throughout the area. The area includes approximately 58,590 acres (12 percent BLM, 3 percent state, and 85 percent private).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to six fires which burned an estimated 5,370 acres. Average fire size was 895 acres.

**Intermix:** The area contains numerous subdivisions and access is limited. Population density is high; escaped fire potential is medium; the potential for loss of life or property is high; community support and community safe efforts are high. The area has a high density of homes and roads.

**Area concerns and constraints:** The development of private homes and subdivisions as well as the growth of Helena near public lands complicate fire management. Smoke and air quality impacts from fires affect people in Helena and surrounding areas. Fires could threaten historical mining features.

**Resource objectives:** Manage fire to protect subdivision areas and visual quality.

**Fire objectives:** Wildland fire is not desired due to the interface with subdivisions and other developments. Appropriate management response to wildland fire will be aggressive suppression. Confine or contain unplanned ignitions to smallest feasible size. Prescribed fire may be used in the Scratchgravel Hills. Other methods may also be used to reduce hazardous fuels and to protect nearby subdivisions and other developments.

## **WISE RIVER TOWNSITE (B17)**

**Area description:** The area is characterized by steep topography and close proximity to the highway. The area includes approximately 10,100 acres (14 percent BLM, 1 percent state, 78 percent private, and 7 percent FS). The area is also characterized by numerous roads from past mining activities.

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to five fires which burned less than three acres. Average fire size was about .5 acres.

**Intermix:** Wise River townsite is in Beaverhead County. Population density is medium; escaped fire potential is medium; potential for loss of life or property is low; and community support and community safe efforts are medium. The area has high value property and sensitive viewsheds along the Big Hole River corridor. There is close proximity to private land and structures. It is an interface area that is expanding from the townsite and is becoming more difficult to defend from potential wildfire.

**Area concerns and constraints:** Proximity to private land and structures limits suppression options. Obvious concerns focus on structural developments, croplands, livestock and livestock forage needs.

**Resource objectives**: Manage native vegetation to meet standards for rangeland and forest health. Maintain stable soils and sustain current land uses. Sagebrush habitats, especially those identified in wintering areas and big game concentration areas should be maintained to the maximum extent possible.

Reduce the long-term fire hazard on BLM lands adjacent to developed areas by reducing stocking densities of forest stands. Maintain or enhance aspen clones in the vicinity of the Scenic Byway.

**Fire objective:** Wildland fire is not desired due to density of structures and large amount of private land. Appropriate management response to wildland fire will be aggressive suppression. Confine or contain unplanned ignitions to smallest feasible size. Prescribed fire may be used in the Wise River Townsite to reduce hazardous fuel conditions.

## BOZEMAN/LIVINGSTON SCATTERED TRACTS (A18)

**Area description:** This area consists of numerous tracts with various fuel types scattered throughout the Bozeman and Livingston area. The total size and percent of land administered by the BLM is unknown.

**Area concerns and constraints:** The scattered land pattern and large areas of adjoining private land make modified fire suppression or active prescribed fire impractical. This area also contains the Yellowstone River WSA.

**Resource objectives:** Protect interface/intermix areas.

**Fire objectives:** Wildland fire is not desired in this area due to the large amount of private and agricultural land, interface with subdivisions, and other developments. The appropriate management response to wildland fire within the Bozeman and Livingston scattered tracts would be

aggressive fire suppression. Confine or contain unplanned ignitions to smallest feasible size. Prescribed fires would not be used in this area due to the large amount of private land, agricultural lands, and rural subdivisions.

#### Wildland fire suppression and rehabilitation:

Special areas and wilderness study areas: This area contains the Yellowstone River Island WSA. See guidance for wildland fire suppression and rehabilitation within WSAs. This area has high resource values including cultural, relic vegetation, high visual and scenic values. A Resource Advisor shall assist the Incident Commander in making suppression decisions. This area will normally involve an alternate suppression strategy due to limited access. Intensive fire suppression techniques will not be used.

#### **BOULDER RIVER (B5)**

Area description: This area contains approximately 40 percent transitional woodland fuel type dominated by Douglas fir, 40 percent sagebrush/grass, and 20 percent lodgepole pine/Douglas fir fuel type. The area contains a "cultural mining district" which requires special protection of historical values. This area is also part of a Forest Service Landscape Plan. The area includes approximately 264,400 acres (5 percent BLM, 17 percent private, and 78 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 47 fires which burned an estimated 55 acres. Average fire size was 1.2 acres.

**Intermix:** Numerous subdivisions and homes occur on adjoining land near the town of Boulder and the High Ore Mine area. This area is in Jefferson County. It has medium population density; medium escaped fire potential; medium potential for loss of life or property; medium community support; and medium community safe efforts. There is interspersed private land with logging and mining activities.

Area concerns and constraints: Unplanned fire is likely to damage property. Subdivisions have created an intermix which limits opportunities for modified suppression. The historic mining district also limits suppression and prescribed fire opportunities. The presence of a Bonneville Power Administration (BPA) power line affects fire suppression tactics. Open mine shafts, air vents, and large collapsed stopes should be avoided.

**Resource objectives:** Reduce conifer colonization and achieve desired vegetative communities.

Fire objectives: Unplanned fire is not desired due to the intermix with Boulder, the High Ore Mine area, and other developments. The appropriate management response to wildland fire would be aggressive fire suppression. Prescribed fire and other fuels management strategies may be appropriate to reduce fuels buildup and to avoid or mitigate the effects of potential wildland fires. The use of fire would be limited as a management tool due to intermix with subdivisions and the historical mining district. Fire may be used to limit timber encroachment into sagebrush/ grass communities; to open willow, conifer woodlands and aspen stands; and to improve age structure and stand vitality.

Wildland fire suppression and rehabilitation: Confine or contain unplanned ignitions to less than 200 acres.

**Prescribed fires and other fuels management:** Prescribed fires could be used to improve age structure and stand vitality. Mechanical treatments may also be required to reduce heavy fuel loading.

## **SPOKANE HILLS AND NORTH (B15)**

**Area description:** This area is characterized by a scattered land pattern with numerous subdivisions. It is predominately a ponderosa pine/grass fuel type. The area includes approximately 151,000 acres (4 percent BLM, 6 percent state, and 90 percent private).

**Wildland fire history:** Much of this area burned in 2000. Federal agencies responded to 18 fires which burned an estimated 435 acres. Average fire size was 24.2 acres.

**Intermix:** This area contains scattered subdivisions with medium population density. Much of this area burned in a 2000 wildland fire. The type and amount of future revegetation will determine the escaped fire potential and potential for loss of life or property.

**Area concerns and constraints:** Access to public land is difficult due to steep terrain and surrounding private land. Subdivisions limit opportunities for modified suppression and increase the potential impacts of smoke.

**Resource objectives:** Rehabilitate the area following wildland fire to stabilize soils, reestablish vegetation, and minimize soil loss and water pollution.

**Fire objectives:** Fire is not desired in this area due to the interface with subdivisions and other developments. The appropriate management response to wildland fire within the Spokane Hills and North area would be aggressive fire suppression. Prescribed fire and other fuels management strategies may be appropriate to reduce fuels buildup and to

avoid or mitigate the effects of potential wildland fires in the future.

## **ABSAROKA FOOTHILLS (C1)**

**Area description:** This area is on the western fringe of the Absaroka Mountain Range. It contains approximately 50 percent Douglas fir fuel type and 50 percent sagebrush/grass fuel type. The area includes approximately 67,700 acres (6 percent BLM, 3 percent state, 52 percent private, and 39 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to four fires which burned an estimated 80 acres. Average fire size was 20 acres.

**Interface:** Some subdivisions exist, primarily in the Paradise Valley area. Paradise Valley is south of Livingston in Park County. It has medium population density; low escaped fire potential; low potential for loss of life or property; medium community support; and low community safe efforts.

**Area concerns and constraints:** Fire management opportunities are limited by poor access and the small size of BLM-administered tracts in the area.

**Resource objectives**: Manage native vegetation to meet standards for rangeland and forest health. Maintain stable soils and sustain current land uses. Sagebrush habitats, especially those in identified sage grouse nesting and wintering areas and big game concentration areas should be maintained to the maximum extent possible.

**Fire objectives:** Carefully managed wildland fire, subject to constraints, may help manage the ecosystem. Prescribed fire/other methods may be used to help meet the adjacent Forest Service Landscape Management objectives and to reduce hazardous fuels buildup where conifers have encroached into sagebrush parks.

## **BIG BELT MOUNTAINS (C2)**

**Area description:** This area is on the fringe of the Big Belt Mountains and consists primarily of ponderosa pine fuel types at the lower elevations. Douglas fir occurs in drainages and on northern aspects. The area includes approximately 328,000 acres (1 percent BLM, 23 percent private, and 76 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 106 fires which burned an estimated 630 acres. Average fire size was 5.9 acres.

**Intermix**: This area contains a few isolated ranches and farms.

**Area concerns and constraints:** Fire management is influenced by transitional big game winter range, adjoining private lands, and the Forest Service Landscape Plan.

**Resource objectives**: Manage native vegetation to meet standards for rangeland and forest health. Maintain stable soils and sustain current land uses. Sagebrush habitats, especially those in big game concentration areas should be maintained to the maximum extent possible.

**Fire objectives:** Wildland fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Prescribed fire/other methods may be used to reduce hazardous fuels and to limit encroachment of Douglas fir and ponderosa pine into the sagebrush/grass parks and to open up and revitalize aspen stands where appropriate.

## **CLANCY/MARYSVILLE (C6)**

Area description: This area contains very scattered and mixed ownership. Fuel types vary from high elevation conifers to sagebrush/grass communities. There are numerous subdivisions throughout the area. The Marysville area, in Lewis and Clark County, contains heavy coniferous commercial forests of lodgepole pine and Douglas fir which are overstocked. This timber is in the 100 year age class. The area also contains a ski area and a historic mining district. The area includes approximately 269,000 acres (10 percent BLM, 1 percent state, 44 percent private, and 45 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 149 fires which burned an estimated 426 acres. Average fire size was 2.9 acres.

**Intermix:** Subdivisions are prevalent throughout the Clancy and Marysville areas. The Great Divide Ski Area with numerous structures is also present within this polygon. The Divide-Marysville area near Helena contains some areas with high density of homes and roads. It has high population density; escaped fire potential is medium; potential for escaped fire is medium; potential for loss of life or property is high; and community support and community safe efforts are considered high.

**Area concerns and constraints:** Interface with subdivisions and other private developments will limit opportunities for modified suppression of wildfires. The Marysville historic mining district limits the use of heavy equipment.

The Great Divide Ski Area also limits suppression options and the use of heavy equipment. Avoidance of open mine shafts, air vents, and large collapsed stopes will be required during fire suppression operations.

**Resource objectives:** Protect urban interface areas, ski area, and historical resources. Reduce hazardous fuel areas with prescribed fire and mechanical treatments.

**Fire objectives:** Carefully managed wildland fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Fire/other methods may be used to adjust age structure of the 100 year old timber stands and to reduce hazardous fuel buildup where public lands interface with subdivisions and other developments.

**Prescribed fires and other fuels management:** Prescribed fires/other methods may be used to adjust the age structure of heavy coniferous commercial forest of lodgepole pine and Douglas fir which are overstocked and in the 100 year age class communities.

## **ELKHORN MOUNTAINS (C7)**

Area description: The area consists of the South Elkhorns, the North Elkhorns, and Crow Creek management units. The area contains approximately 50 percent sagebrush/grassland fuel type, 30 percent woodland transition-mixed juniper, limber pine, an Douglas fir, and 20 percent Douglas fir/lodgepole pine and ponderosa pine fuel type. Smaller area of alpine timber also occur at higher elevations. Conifers are generally overstocked from past fire exclusion and are encroaching into sagebrush/grass areas. Conifer communities are about 100 years old and lack diversity of age classes. Many areas of aspen and willow are disappearing due to conifer encroachment. The area includes approximately 472,000 acres (14 percent BLM, 3 percent state, 49 percent private, and 34 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 168 fires which burned an estimated 55,020 acres. Average fire size was 327.5 acres.

**Interface/intermix:** Some isolated homes and ranches occur on adjoining land. Subdivisions are present on the north end of the Elkhorn Mountain Range.

Area concerns and constraints: Management should complement Forest Service objectives within the Landscape Plan. Adjoining private land may limit fire management opportunities. Close coordination with adjoining landowners is necessary. Urban interface in the North Elkhorns near Helena and Clancy limits suppression

opportunities and makes prescribed fire management difficult. Much of the area should be treated mechanically prior to burning due to heavy fuel loading. The Elkhorns Tack on WSA precludes use of mechanical equipment. The presence of (BPA) powerlines complicates suppression efforts.

Resource objectives: Reduce conifer encroachment into sagebrush/grass parklands and foothills to improve habitat for elk and deer. Reduce excess fuels buildup in woodland habitat by managing naturally occurring fire to achieve resource objectives. Be consistent with the Elkhorns Fire Management Plan.

Fire objective: Wildland fire, subject to constraints, may be desired to help manage the ecosystem. Fire/other methods may be used to open the closed timber stands to promote a diversity of age structure and return sites to a more open savannah type. Fire may be used to reduce conifer encroachment into willow and aspen communities. Big game winter range may be maintained or improved by using fire to keep sites palatable for winter forage by rejuvenating grasses, big sagebrush, mountain mahogany and bitterbrush and limiting conifer encroachment.

#### Wildland fire suppression and rehabilitation:

Cultural: The Elkhorn Townsite Historic District and the Golconda Creek Historic District will be protected from wildfire.

Special areas and wilderness study areas: There are several areas within the Elkhorn Mountains, including the Elk Horn Mountain WSA, that receive special attention. See guidance for wildland fire suppression and rehabilitation within WSAs. These areas have high resource values including cultural, relic, vegetation, high visual and scenic values and/or historic attributes. A Resource Advisor shall assist the Incident Commander in making suppression decisions. Intensive fire suppression techniques, especially the use of heavy equipment, shall be carefully analyzed prior to being committed.

Prescribed fires and other fuels management: Prescribed fire and other methods may be used to reduce fuels buildups and meet other resource objectives. Prescribed fires may be used to open dense conifer stands and reduce conifer encroachment into sagebrush/grass parks and foothills. Prescribed fire activity will be curtailed if burn target is reached through planned and unplanned ignitions. Mechanical treatments may be required prior to burning due to heavy fuel loadings. Priority will be given to projects within Wildlife Habitat Management Unit 36.

## **FLEECER MOUNTAINS (C8)**

**Area description:** Approximately 40 percent of the area is sagebrush/grass fuel type and 50 percent is woodland transitional forest dominated by Douglas fir. About 5-10 percent of this forest type also includes lodgepole pine and spruce. Mountain mahogany occurs on rocky areas and is present on about 10 percent of the area The area includes 284,000 acres (6 percent BLM, 2 percent state, 55 percent private, and 37 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 67 fires which burned an estimated 225 acres. Average fire size was 3.3 acres.

**Interface/intermix**: Isolated homes and ranches are present within the area.

Area concerns and constraints: The combination of steep topography and proximity to the highway and private land limits suppression options. Poor access limits opportunities for suppression and prescribed fire activities in the steep/rocky mountain mahogany areas. Use of mechanized equipment is limited within the watershed of the Big Hole River to protect critical habitat for the Arctic Grayling. The BPA powerline through the area also limits suppression efforts.

**Resource objectives**: Reduce conifer encroachment into sagebrush/grass parklands and foothills to maintain/enhance winter range for elk and mule deer. Fires within one mile of the Big Hole River should be immediately suppressed to protect the visual quality of the river corridor.

**Fire objective:** Fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Use fire/other methods to limit the encroachment of Douglas fir into sagebrush/grass parks. Fire may be used to open stands of aspen to encourage reproduction and improve the health of these communities. Fire may be used to revitalize mountain mahogany communities.

#### Wildland fire suppression and rehabilitation:

Riparian areas and fisheries habitat: See Appendix A for guidance concerning Special Status species habitat such as the Big Hole River and its tributaries. All Arctic Grayling habitat would be protected.

**Prescribed Fire and Other Fuels Management:** Prescribed fire may be used to reduce fuels buildup and to meet other resource objectives. Prescribed fires may be used to limit encroachment of Douglas fir into sagebrush/grass parks, to improve the health of aspen stands, and to revitalize mountain mahogany.

## MCCARTNEY/ROCHESTER (C10)

See Dillon Field Office

## PIPESTONE (C12)

**Area description:** About 40 percent of the area contains sagebrush/grass fuel types; another 40 percent is dominated by either transitional or true timber fuel types made up primarily of Douglas fir. About 10 percent of the area consists of large boulder fields. There are also large areas of south facing mountain mahogany stands. The area includes 369,300 acres (11 percent BLM, 4 percent state, 46 percent private, and 39 percent FS).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 108 fires which burned an estimated 1,624 acres. Average fire size was 15 acres.

**Intermix:** Subdivisions are present in the Toll Mountain and Pipestone areas. These are near Whitehall in Jefferson County. They are characterized by medium population density; medium escaped fire potential; medium potential for loss of life or property; medium community support; and low community safe efforts.

**Area concerns and constraints:** Subdivisions make fire management more difficult. Highly erosive soils contribute heavy sediment loads within the watershed, particularly if heavy equipment is used.

**Resource objectives**: Manage native vegetation to meet standards for rangeland health. Maintain stable soils and sustain current land uses. Sagebrush habitats, especially those in identified sage grouse nesting and wintering areas and big game concentration areas should be maintained to the maximum extent possible.

**Fire objectives:** Fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Fire may be used to enhance big game winter range and reduce hazardous fuels in interface areas.

## **SLEEPING GIANT/SHEEP CREEK (C14)**

**Area description:** This area contains the Sleeping Giant/Sheep Creek WSA (10,597 acres), and the Sleeping Giant ACEC (11,609 acres). It is characterized by steep, rugged topography with numerous rock outcroppings. Approximately 50 percent of the area is forested with Douglas fir, ponderosa pine, lodgepole pine, and limber pine being the major species. The remainder of the area contains open

grasslands, rock outcroppings, and talus slopes. Approximately 2000 acres contain substantial amounts of overstory Douglas fir/pine mortality where 25-50 percent is dead. Land ownership in the area is 95 percent BLM, and 5 percent state.

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to six fires which burned about three acres. Average fire size was about .5 acres.

Interface: No interface areas are present within this area.

Area concerns and constraints: Suppression actions should be done in a manner that least impairs wilderness characteristics in the Sleeping Giant/Sheep Creek WSA. The area also contains the Sleeping Giant ACEC, which was designated for dispersed recreation opportunities, natural scenic qualities, and high value wildlife habitat. Use of mechanized equipment is limited due to the Wilderness Study Area (WSA) designation. Fire control is difficult due to poor access and steep terrain. Surrounding private lands also need to be considered.

**Resource objectives**: Maintain the natural and visual qualities of these specially designated areas.

**Fire objective:** Fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Prescribed fire may be used only after very careful consideration and planning to open up encroached areas of timber and restore ponderosa pine savannah communities, in order to improve habitat for priority native wildlife species. No fires are desired in portions of the Sleeping Giant WSA within the viewsheds seen from the Missouri River.

Wildland fire suppression and rehabilitation: Use of mechanized equipment is limited due to the WSA designation. Full suppression should be used when fuel release potentials are high to extreme. See guidance for wildland fire suppression and rehabilitation within WSAs.

Forestry: Salvage harvest of forest products would be considered outside of WSAs.

**Prescribed fires and other fuels management:** Use prescribed fire to improve habitat for priority native wildlife species by opening up encroached areas of timber to restore ponderosa pine savannah communities. See guidance for use of prescribed fire within WSAs.

## THREE FORKS (C16)

**Area description:** This area is predominately a juniper/limber pine/grassland fuel type. The Horseshoe area

contains commercial Douglas fir fuel types. The Black Sage WSA is located in the northwestern part of the area. The area includes approximately 356,000 acres (8 percent BLM, 5 percent state, and 87 percent private).

**Wildland fire history:** Between 1978 and 1999, federal agencies responded to 16 fires which burned an estimated 514 acres. Average fire size was 32.1 acres.

**Interface/intermix:** Some isolated homes and ranches are present in this area.

Area concerns and constraints: Adjoining private lands make access and modified suppression activities difficult. Use of mechanical equipment is limited in the Black Sage WSA and minimal impact suppression methods would be applied. Avoidance of open mine shafts, air vents, and large collapsed stopes would be required during fire suppression operations.

**Resource objectives**: Manage native vegetation to meet standards for rangeland and forest health. Maintain stable soils and sustain current land uses. Sagebrush habitats, especially those in identified sage grouse nesting and wintering areas and big game concentration areas should be maintained to the maximum extent possible.

**Fire objectives:** Fire, subject to the constraints listed above, may be desired to help manage the ecosystem. Prescribed fire/other methods may be used on the western portion of the area to limit encroachment of Douglas fir and juniper into the sagebrush/grass areas.

## Wildland fire suppression and rehabilitation:

Special areas and wilderness study areas: There are several areas within the Three Forks area that receive special attention. See guidance for wildland fire suppression and rehabilitation within WSAs. These areas have high resource values including cultural, relic, vegetation, high visual and scenic values and/or historic attributes. A Resource Advisor shall assist the Incident Commander in making suppression decisions. Intensive fire suppression techniques, especially the use of heavy equipment, shall be carefully analyzed prior to being committed.

Visual resources: Fire rehabilitation of WSAs should be coordinated with the Field Office VRM specialist and protected as much as possible.

**Prescribed fires and other fuels management:** Prescribed fires/other methods may be used to limit encroachment of Douglas fir and juniper into sagebrush/grass areas.